

California

State Agency

Water quality in California is governed by the Porter-Cologne Water Quality Control Act.¹ This law assigns overall responsibility for water rights and water quality protection to the State Water Resource Control Board (SWRCB)² and directs the nine statewide Regional Water Quality Control Boards (RWQCBs) to develop and enforce water quality standards within their boundaries.

Delegated Permit Authority

California has been delegated permit authority for the National Pollutant Discharge Elimination System (NPDES) permit program including stormwater permits for all areas except Indian lands. Issuing CWA § 404 dredge and fill permits remains the responsibility of the U.S. Army Corps of Engineers (COE), but the State actively uses its CWA § 401 certification authority to ensure 404 permits protect State water quality standards.

State Definition of Covered Waters

Under California State law, “waters of the state” means “any surface water or groundwater, including saline waters, within the boundaries of the state.”³ Therefore, water quality laws apply to both surface and groundwater.

After the US Supreme Court decision in *Solid Waste Agency of Northern Cook County v. Army COE of Engineers (SWANCC v. USCOE)*,⁴ the Office of Chief Counsel of the SWRCB released a legal memorandum confirming the State’s jurisdiction over isolated wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other “waters of the state” are subject to State regulation, and this includes isolated wetlands. In general, the RWQCBs regulate discharges to isolated waters in much the same way as they do for Federal-jurisdictional waters, using Porter-Cologne rather than CWA authority.

Point Sources and NPDES Permits

The BLM does not hold any NPDES permits in California.

Water Quality Standards

Designated Uses

California recognizes 23 designated or beneficial uses for water bodies. Figure One outlines California’s designated uses. California policy defines an existing use as one that has occurred since November 28, 1975, or that the water quality is suitable to allow.

¹ California Water Code § 13000 et. seq.

² Information on the State Water Resource Control Board is available at: <http://www.swrcb.ca.gov/>.

³ Cal Water Code § 13050(e).

⁴ *Solid Waste Agency of Northern Cook County v. United States Army COE of Engineers*, 531 U.S. 159 (2001).

Figure One: California State-Designated Use Descriptions

State-Designated Use Code	State-Designated Use	State-Designated Use Description
MUN	Municipal and Domestic Supply	Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
AGR	Agricultural Supply	Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
PRO	Industrial Process Supply	Uses of water for industrial activities that depend primarily on water quality.
IND	Industrial Service Supply	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.
GWR	Groundwater Recharge	Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
FRSH	Freshwater Replenishment	Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).
NAV	Navigation	Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.
POW	Hydropower Generation	Uses of water for hydropower generation.
REC-1	Water Contact Recreation	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.
REC-2	Noncontact Water Recreation	Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
COMM	Ocean Commercial and Sport Fishing	Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
AQUA	Aquaculture	Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
WARM	Warm Freshwater Habitat	Uses of water that support warmwater ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
COLD	Cold Freshwater Habitat	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.
SAL	Inland Saline Water Habitat	Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.
EST	Estuarine Habitat	Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).
MAR	Marine Habitat	Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as

		kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).
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WILD	Wildlife Habitat	Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
BIOL	Preservation of Biological Habitats of Special Significance	Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.
RARE	Rare, Threatened, or Endangered Species	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.
MIGR	Migration of Aquatic Organisms	Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.
SPWN	Spawning, Reproduction, and/or Early Development	Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
SHELL	Shellfish Harvesting	Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.

Source: 2002 California 305(b) Report on Water Quality, Appendix A, State Water Resources Control Board, August, 2003. Available at: <http://www.swrcb.ca.gov/tmdl/305b.html>.

Water Quality Criteria

California has developed both numeric and narrative water quality standards (called “water quality objectives” in California). Each regional board establishes numeric and/or narrative limits for California’s surface waters in its jurisdiction. The University of California, Davis has established a Water Quality Standards Inventory Database.⁵ The database consists of water quality objectives (numeric or narrative limits) and beneficial uses that have been established by each regional board for all of California’s surface waters. The database is searchable by region or water body name.

⁵ Available at: <http://www.ice.ucdavis.edu/wqsid/>. The Water Quality Standards Inventory Database system consists of 11 relational database-tables linked to each other by three key pieces of information: hydrologic subunit numbers, designated beneficial uses, and the name of the water body. California surface waters are located within hydrologic subunits that are assigned unique numbers by the California Department of Water Resources for mapping surface waters. RWQCB Basin Plans use the hydrologic unit number along with the name of a water body within the hydrologic unit to identify surface waters and their designated beneficial uses. The hydrologic unit numbers along with the name of the water body are used as the key (unique) record for the design of the Caltrans Water Quality Standards Inventory Database. The database records the beneficial uses that have been designated by each regional board and the water quality objectives (numeric or narrative limits) that have been established by each regional board. The inventory includes water quality objectives that are generally applicable to all waters within each regional board’s jurisdiction and site-specific water quality objectives that have been established for specific water bodies.

Sediment

Currently, water quality objectives for sediment are established by each RWQCB.⁶ The SWRCB intends to develop and adopt sediment quality objectives (SQOs) for enclosed bays and estuaries. According to the State, this process will take approximately four years to complete. Information on SWRCB's progress and links to current information can be found on-line.⁷

Antidegradation

California's antidegradation policy is found in Resolution 68-16, "Policy with Respect to Maintaining Higher Quality Waters in California," and Resolution 88-63, "Sources of Drinking Water Policy." These resolutions are part of State policy for water quality control and are binding on all State agencies. They apply to both surface waters and groundwater, and protect both existing and potential uses.

California has issued guidance on implementing Federal antidegradation requirements.⁸ The best quality of receiving waters in 1975 is the baseline for implementing the Federal antidegradation policy, and the Federal antidegradation policy is applied in California on a case-by-case basis.

Only two outstanding natural resource waters (ONRWs) (Lake Tahoe and Mono Lake) have been designated in California so far, and there is no formal procedure for additional designations. California's antidegradation guidance states that ONRWs may be designated as part of an adoption or amendment of water quality control plans, and the SWRCB is currently developing a procedure for additional ONRW designation.

California does not currently have a Tier II _ designation, but its use is under consideration by the SWRCB. There is no Tier I designation in California and the State does not designate Tier II water bodies. Instead, the State provides Tier II protection on a per pollutant basis by comparing baseline (1975) receiving water quality with the particular water quality objective or criteria for the pollutant.

ONRWs on BLM Land

There are no listed ONRWs on BLM lands in California.

State 305(b) Reporting

The National Assessment Database (NAD) contains information on the attainment of water quality standards. Assessed waters are classified as Fully Supporting, Threatened, or Not Supporting their designated uses. This information is reported in the National Water Quality Inventory Report to Congress under Section 305(b) of the CWA.⁹

⁶ See each RWQCB's webpage for the sediment criteria within its jurisdiction.

⁷ The SWRCB's Sediment Quality Objective webpage is available at:
<http://www.swrcb.ca.gov/bptcp/sediment.html>.

⁸ This guidance is available at: http://www.epa.gov/ost/standards/wqslibrary/ca/ca_9_fed_anti_pol.pdf.

⁹ California's attainment of water quality standards can be found at:
http://oaspub.epa.gov/waters/w305b_report.state?p_state=CA.

State 303(d) List and TMDLs

The EPA TMDL Tracking System contains information on all impaired waters under section 303(d) of the CWA. The database also has information on EPA-approved TMDLs.¹⁰ As of 2002, the date of the most recent update to the EPA's tracking system, California reported 685 surface waters on its 303(d) List. The State has 18 TMDLs that have been completed and 24 that have been adopted but are pending approval, and the EPA has established 58 technical TMDLs which do not include implementation plans.¹¹

California maintains GIS coverage of impaired streams. The 2002 303(d) List GIS files are available on line.¹² The BLM has not integrated these data with BLM ownership, but plans to do this in the future.

303(d) List

Listing and Credible Data Standards

In September 2004, California adopted a Water Quality Control Policy.¹³ The purpose of this policy is to establish California's listing factors and delisting factors; establish a process for gathering and evaluating available data; and establish the state's TMDL scheduling. According to this policy, data and information from water bodies shall be analyzed using a "weight-of-evidence" approach. The following steps describe the weight-of-evidence approach:

1. **Data and Information Preprocessing**: All data and information for existing listings shall be solicited and assembled, as appropriate (sections 6.1.1 and 6.1.2.1). Water body fact sheets (section 6.1.2.2) describing the assessments shall be prepared. Evaluation guidelines (section 6.1.3), if needed, shall be selected and the quality of the data (section 6.1.4) and quantity of data (section 6.1.5) shall be assessed.
2. **Data and Information Processing**: All data and information shall be evaluated using the decision rules listed in sections 3 or 4, as appropriate, and using applicable implementation factors (including, but not limited to, sections 6.1.2.2 and 6.1.5.1 through 6.1.5.9). RWQCBs shall also develop a schedule for completion of TMDLs (section 5). All other information not addressed under sections 3, 4, 5, or 6 shall be evaluated and presented in fact sheets.
3. **Data Assessment**: An assessment in favor of or against a listing of a water body pollutant combination shall be presented in fact sheets. The assessment shall identify and discuss relationships between all available evidence of impairment and specific pollutants. This assessment shall be made on a pollutant-by-pollutant (including toxicity) basis. RWQCBs shall approve all decisions to list or de-list a water segment (section 6.2).

¹⁰ California's 303(d) Lists and approved TMDLs are available at:
http://oaspub.epa.gov/waters/state_rept.control?p_state=CA.

¹¹ Lists of these TMDLs can be found in 2002 California 305(b) Report on Water Quality, State Water Resources Control Board, August, 2003. Available at: <http://www.swrcb.ca.gov/tmdl/305b.html>.

¹² Available at: http://www.swrcb.ca.gov/tmdl/303d_lists2002.html.

¹³ Available at: http://www.swrcb.ca.gov/tmdl/docs/ffed_303d_listingpolicy093004.pdf.

Water segments will be placed on California's 303(d) List if any of the following conditions are met:

- If the number of measured exceedances of water quality criteria is equal to or greater than the binomial test requirement depending upon the sample size (Chapter 3 of the Water Quality Control Policy includes tables indicating the required number of exceedances for a given sample size for toxic pollutants and conventional pollutants);
- If bacteria water quality standards are exceeded using the binomial distribution for conventional pollutants;
- If a health advisory against the consumption of edible resident organisms or a shellfish harvesting ban has been issued for the water segment;
- If the tissue pollutant levels in organisms exceed a pollutant-specific evaluation using the binomial distribution for toxic pollutants;
- If the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution for toxic pollutants;
- If qualitative assessment of the water segment for nuisance water odor, taste, excessive algae growth, foam, turbidity, oil, trash, and color are associated with numerical water quality data using the binomial distribution for toxic pollutants;
- If the water segment exhibits adverse biological response measured in resident individuals as compared to reference conditions;
- If the water segment exhibits significant degradation in biological populations and/or communities as compared to reference site(s); or
- If the water segment exhibits concentrations of pollutants or water body conditions for any listing factor that shows a trend of declining water quality standards attainment (antidegradation violation).

When considering a water segment for listing or de-listing, all readily available data and information shall be evaluated. However, the quality of the data must be of sufficiently high quality (credible data) to make determinations of water quality standards attainment. Data supported by a Quality Assurance Project Plan (QAPP) are acceptable for use in listing or de-listing a water segment. A QAPP must, at a minimum, contain the following elements:

- Objectives of the study, project, or monitoring program;
- Methods used for sample collection and handling;
- Field and laboratory measurement and analysis;
- Data management, validation, and recordkeeping (including proper chain of custody) procedures;
- Quality assurance and quality control requirements;
- A statement certifying the adequacy of the QAPP (plus name of person certifying the document); and
- A description of personnel training.

Site-specific or project-specific sampling and analysis plans for numeric data should also include:

- Data quality objectives or requirements of the project;
- A statement that data quality objectives or requirements were achieved;
- Rationale for the selection of sampling sites, water quality parameters, sampling frequency, and methods that assure the samples are spatially and temporally representative of the surface water and representative of conditions within the targeted sampling timeframe; and
- Documentation to support the conclusion that results are reproducible.

For narrative and qualitative standards, the submission must:

- Describe events or conditions that indicate impacts on water quality;
- Provide linkage between the measurement endpoint (e.g., a study that may have been performed for some other purpose) and the water quality standard of interest;
- Be scientifically defensible;
- Provide the analyst's credentials and training; and
- Be verifiable by the SWRCB or the RWQCB.

The data from major monitoring programs in California and published USGS reports are considered of adequate quality and do not require a separate QAPP.¹⁴

In addition to its 303(d) List of Water Quality Limited Segments, California maintains an Enforceable Program List,¹⁵ a Monitoring List,¹⁶ and a TMDL Completed List.¹⁷

De-Listing

As a general rule, it takes similar data to de-list a water body as to list one. If the procedures described above are found to indicate a water body is not impaired, the water body will be de-listed. However, the binomial distribution cannot be used to support a delisting with a sample size less than 28 for toxicants and less than 26 for conventional pollutants.

TMDLs

TMDLs in California are developed either by the RWQCBs or by the EPA. TMDLs must consider and include allocations to both point sources and nonpoint sources of listed pollutants. TMDLs developed by the RWQCBs are designed as Basin Plan amendments and include implementation provisions. A Basin Plan is a legal document that describes how a regional board intends to manage water quality. TMDLs developed by EPA typically contain the total load and load allocations required by CWA § 303(d), but do not contain comprehensive implementation provisions. This stems from the fact that the EPA authorities related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by CWA § 319.

California follows a five steps process in producing a TMDL:

- *Involve Stakeholders*: Stakeholders can be the general public, business interests, government entities, environmental groups, or anyone concerned with a particular water

¹⁴ These major programs include the Surface Water Ambient Monitoring Program (SWAMP), the Southern California Bight Projects of the Southern California Coastal Water Research Project, EPA Environmental Monitoring and Assessment Program, and the Regional Monitoring Program of the San Francisco Estuary Institute.

¹⁵ Available at: http://www.swrcb.ca.gov/tmdl/docs/2002_enf_prog_list_020403.pdf.

¹⁶ Available at: http://www.swrcb.ca.gov/tmdl/docs/2002_mon_list_020403.pdf.

¹⁷ Available at: http://www.swrcb.ca.gov/tmdl/docs/2002_tmdl_comp_list_020403.pdf.

body. Stakeholders are involved at the beginning of the process in order to provide input to the RWQCBs on the development of TMDLs.

- *Assess water body:* In this step, pollution sources and amounts, or "loads," are identified for various times of the year. Then the overall effect of these loads on the water body is determined.
- *Define the Total Load and Develop Allocations:* To ensure water quality standards are met and beneficial uses are attained, allocations of pollutant load to all sources are established for the pollutant(s) in question. TMDLs can address single pollutants or combinations of pollutants. The sum of the allocations must result in the water body attaining the applicable water quality standards. Federal regulations provide that TMDLs can be expressed as mass, thermal energy, toxicity, or other appropriate measures. In California, toxicity and other appropriate measures often serve as the basis for TMDLs. As watershed management efforts mature it is likely that an increased dependence on measures other than mass or thermal energy will serve as the basis for TMDLs.
- *Develop Implementation Plan:* This step is a description of the approach and activities to be undertaken to ensure the allocations are met and identification of parties responsible for carrying out the actions.
- *Amend the Basin Plan:* Federal law requires that TMDLs be incorporated into the Basin Plans. The TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions. Basin Plan amendments are adopted through a public process that requires approval of the TMDLs by a regional board, the State board, the Office of Administrative Law, and USEPA Region 9.

Establishment, Apportionment, and Implementation

TMDL implementation has recently become a significant issue in California. The SWRCB has interpreted State law (Porter-Cologne Water Quality Control Act) to require that implementation be addressed when TMDLs are incorporated into Basin Plans (water quality control plans). The Porter-Cologne Act requires each regional board to formulate and adopt water quality control plans for all areas within its region. It also requires that a program of implementation be developed that describes how water quality standards will be attained. TMDLs can be developed as a component of the program of implementation, thus triggering the need to describe the implementation of that TMDL, or alternatively as a water quality standard. When the TMDL is established as a standard, the program of implementation must be designed to implement the TMDL. Typically a revision to the program of implementation is needed whenever a new standard is adopted.

California's TMDL program is currently operating under three consent decrees. These decrees cover most of the North Coast Region, all of the Los Angeles Region, and Newport Bay and its tributaries in the Santa Ana Region. Additional statewide suits are also on-going.

Technical issues and the number of combinable pollutants affect the exact number of TMDLs that will be necessary to address the State's water quality problems. Some multiple pollutants can be addressed in a single TMDL, or multiple water bodies in a watershed may be addressed in a single TMDL project. Based on the current 303(d) List with over 1,883 water body/pollutant combinations, the State board estimates that the total number of TMDLs needed is over 400. The regional boards are currently engaged in developing over 120 TMDLs, many addressing multiple pollutants. Schedules have been developed for establishing all required TMDLs over a 13-year period.

The BLM's involvement in TMDLs in California has largely centered around Clear Creek. The BLM land contains abandoned mines that contribute mercury and sediment-contaminated runoff. The BLM has worked with the State to address these abandoned mines and runoff through the TMDL process.

Water Quality Monitoring

California has a Surface Water Ambient Monitoring Program (SWAMP). Initiated in 1999, SWAMP oversees the State's monitoring activities. To ensure statewide consistency, SWAMP also specifies the protocols and methodologies to be used for sampling, data analysis, and data reporting. More information on SWAMP can be found in Chapter 3 of California's 2002 305(b) Report.¹⁸

California also has a Citizen Monitoring Program. This monitoring takes numerous forms based on the desires and capabilities of different community groups. Organizations that collect data in compliance with appropriate quality control measures can provide their data to the State for use in 305(b) Reports and 303(d) listing procedures.

BLM has been involved in TMDL monitoring as well as nonpoint source pollution monitoring in off-road vehicle recreational areas. The BLM maintains a gauging station as part of its participation in the Clear Creek TMDL.

Nonpoint Source Pollution Program

The "Plan for California's Nonpoint Source Pollution Control Program" (NPS Program Plan) was adopted by the SWRCB in December 1999. This plan was developed collaboratively between the SWRCB and the California Coastal Commission (CCC) and satisfies both Section 319 of the Clean Water Act and Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1999. The NPS Program is largely non-regulatory and uses voluntary and incentive measures.

The State's NPS Program Plan identified six primary sources of NPS pollution: 1) agriculture, including dairies, pesticide runoff, and irrigation return flows; 2) silviculture; 3) urban runoff; 4) marina and recreational boating operations; 5) hydromodification activities such as stream channel modification; and 6) destruction of wetlands and riparian areas. The NPS Program is focused on controlling NPS pollution through the implementation of 61 management measures (MMs).¹⁹ California's Management Measures for Polluted Runoff (CAMMPR) are similar to best management practices (BMPs). To implement the MMs, dischargers are encouraged to control their discharges through outreach, education, and technical and financial assistance. California uses its CWA § 319(h) grant program and various bond and loan programs to implement education programs, demonstration projects, and other outreach activities.

¹⁸ Available at: <http://www.swrcb.ca.gov/tmdl/305b.html>.

¹⁹ California's Management Measures can be found at: <http://www.swrcb.ca.gov/nps/cammpr.html>.

BMPs

California's Management Measures for Polluted Runoff constitute its BMPs for controlling NPS pollution. California has management measures for agriculture (including grazing), forestry, urban areas, marinas and recreational boating, hydromodification, and wetlands, riparian areas, and vegetated treatment systems.²⁰

Implementation on Federal Land

California's CWA § 319 grants are administered in conjunction with the CALFED Bay-Delta Program funding. BLM field offices are working with watershed groups which have used some of these pooled monies for nonpoint source reduction projects.

Federal Consistency

The Federal consistency provisions of CWA § 319 authorize California to review Federal financial assistance programs and development projects for their effect on water quality. If the State determines that an application or project is not consistent with the State Nonpoint Source Management Program and notifies the Federal agency of its concerns, the agency must make efforts to accommodate the State's concerns, or explain its decision to not make accommodations, in accordance with Executive Order 12372. Additionally, CWA § 313 requires Federal agencies having jurisdiction over property or facilities, or engaged in activities that may result in water pollution, to comply with State and local water pollution control regulations and authorities to the same extent as any non-governmental entity.

The State's Water Quality Certification (WQC) Program regulates discharges of dredge and fill material under the authorities of CWA § 401 and the Porter-Cologne Water Quality Control Act. This program allows the State to ensure that activities requiring a Federal permit or license, comply with State water quality standards.

The WQC Program is the State's de facto wetland protection program. It protects all waters within the state's regulatory jurisdiction but has special responsibilities for wetlands, riparian areas, and headwater streams because these water bodies are not systematically protected by other State and regional board programs. The WQC Program is also the State's primary tool to address in-stream hydromodification impacts.

Enforceable State Laws/Policies/Programs to Limit NPS Pollution

Water Pollution Control Laws

California's Porter-Cologne Water Quality Control Act contains permitting provisions that can be applied to nonpoint sources of pollution. The law also empowers RWQCBs to order the abatement of discharges, including nonpoint source discharges, that create or threaten to create pollution.

The Porter-Cologne Act requires "[a]ny person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state" to file a "report of waste discharge" with the RWQCB.²¹ The board then must issue a permit (waste discharge requirements or WDRs) implementing "any relevant water quality control plans" and taking into consideration the beneficial uses to be protected, the water quality objectives

²⁰ California's Management Measures can be found at: <http://www.swrcb.ca.gov/nps/cammpr.html>.

²¹ Cal. Water Code § 13260(a)(1).

reasonably required for that purpose, other waste discharges, and the need to prevent nuisances.²² California uses these provisions in the nonpoint context as a backup to voluntary and incentive-based mechanisms, using the regional boards' power to require a report of waste discharge. Timber operations conducted under the State's Z'Berg-Nejedly Forest Practices Act are exempt from the WDRs if the act's requirements are certified as best management practices (BMP) by the EPA, unless the SWRCB makes a finding that compliance by forestry operations is not protecting water quality or the forestry board requests WDRs.²³

A second provision of the Porter-Cologne Water Quality Control Act includes general abatement authority: "Any person who ... discharges waste into the waters of this state in violation of any waste discharge requirement ... or who has caused or permitted ... any waste to be discharged ... into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or ... take another necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts."²⁴

Fish and Fisheries laws

The Fish and Game Code contains several provisions that regulate nonpoint source discharges. Except as authorized by a State or Federal permit, "it is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this state" any "petroleum or residuary product of petroleum, or carbonaceous material or substance"; any "sawdust, shavings, slabs, edgings"; and any "substance or material deleterious to fish, plant life, or bird life."²⁵

The Fish and Game Code also requires stream alteration permits. It is "unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake ... or use any material from the streambeds, without first notifying the [Department of Fish and Game]" and obtaining agreement from that department.²⁶

A provision of the Porter-Cologne law is designed to protect commercial shellfish from "the effects of point and nonpoint pollution sources."²⁷ Regulation is authorized once an area is threatened. A "threatened" area is defined as an area that has been downgraded or restricted by the State's Department of Health Services, subject to closure for more than 30 days per year for 3 previous years, or formally determined by a RWQCB, the Department of Fish and Game, or the California Coastal Commission to be threatened.²⁸ Once the pollution problem affecting the area has been determined, the regional board "shall order appropriate remedial action, including the adoption of best management practices to abate the pollution affecting that area."²⁹ However, the law provides that if agriculture is responsible for the pollution, members of the local agricultural community, local resource conservation district, and the local soil conservation service will have input on developing and implementing remediation strategies.³⁰

²² Cal. Water Code § 13263.

²³ Pub. Res. Code § 4514.3.

²⁴ Cal. Water Code § 13304(a).

²⁵ Cal. Fish and Game Code § 5650.

²⁶ Cal. Fish and Game Code § 1603.

²⁷ Cal. Water Code § 14950(d).

²⁸ Cal. Water Code § 14954.

²⁹ Cal. Water Code § 14956(a).

³⁰ Cal. Water Code § 14956(b).

Operational Requirements

Forestry Requirements

The Z'Berg-Njedly Forest Practices Act contains numerous provisions addressing nonpoint source pollution. The law provides for the division of the State into 3 districts (coast forest, northern forest, southern forest), with distinct rules established by the State board of forestry.³¹ The rules must protect the soil, air, fish, and wildlife, and water resources, including, but not limited to streams, lakes, and estuaries.³² This includes significant soil erosion control measures. The board must “promulgate regulations for each district to govern timber operations that may cause significant soil disturbance.”³³ In addition, the board must “adopt rules for control of timber operations which will result or threaten to result in unreasonable effects on the beneficial uses of the waters of the state.”³⁴ The rules for each district are implemented through requirements for licensing of foresters and for filing and approval of timber harvest plans.

Agriculture and Grazing Requirements

The Health and Safety Code provides that “no person shall keep any horses, mules, cattle, swine, sheep, or livestock of any kind, penned, corralled, or housed on, over, or on the borders of any stream, pond, lake, or reservoir, in a manner that the waters become polluted, if water is drawn therefrom for the supply of any portion of the inhabitants of this state.”³⁵ In addition, “no person shall cause or permit any [livestock] to pollute the waters, or tributaries of waters, used or intended for drinking purposes by any portion of the inhabitants of this state.”³⁶ However, “nothing in this article shall be held to prevent the grazing of livestock in areas embracing any stream or watershed where the grazing would not tend to render the waters unwholesome or injurious to the public health.”³⁷

Earth-Disturbing Activities

California’s land use laws have some provisions applicable to nonpoint source pollution. The State provides for comprehensive local land use regulation. Counties and cities must adopt comprehensive plans that include a “conservation element.” The conservation element must address conservation, development, and utilization of waters, forests, soils, rivers, harbors, fisheries, etc. and may also cover “1) the reclamation of lands and waters; 2) prevention and control of the pollution of streams and other waters; 3) regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan; 4) prevention, control, and correction of the erosion of soils, beaches, and shores; 5) protection of watersheds; 6) the location, quantity and quality of the rock, sand, and gravel resources; and 7) flood control.”³⁸ Land use plans are implemented through zoning regulations and ordinances.

California’s Coastal Act regulates many activities in the coastal area.³⁹ Provisions include the maintenance of biological productivity and water quality;⁴⁰ limits on diking, filling,

³¹ Pub. Res. Code §§ 4531, 4551.

³² 58 Ops. Cal. Atty Gen. 250.

³³ Pub. Res. Code § 4562.5.

³⁴ Pub. Res. Code § 4562.7.

³⁵ Health and Safety Code § 116990.

³⁶ Health and Safety Code § 116995.

³⁷ Health and Safety Code § 117005.

³⁸ Govt. Code § 65302.

³⁹ Pub. Res. Code § 30000 et seq.

or dredging of coastal waters, wetlands, estuaries, and lakes,⁴¹ and limits on channelization, dams, or other substantial alterations of rivers and streams.⁴²

The State Lands Commission administers a permitting program for depositing material upon or removing material from wetlands or other waters.⁴³

Wetlands and §404 Permits

State implementation of §404

Issuing CWA § 404 dredge and fill permits remains the responsibility of the COE, but the State actively uses its CWA § 401 certification authority to ensure section 404 permits protect State water quality standards. The WQC Program, under section 401, is the State's de facto wetland protection program. It protects all waters within the State's regulatory jurisdiction, but has special responsibilities for wetlands, riparian areas, and headwater streams because these water bodies are not systematically protected by other State and regional board programs.

Additional State Laws/Policies/Programs for Wetlands

As mentioned above, California regulates discharges into isolated wetlands using its authority in Porter-Cologne. It regulates discharges to isolated waters in much the same way that discharges to Federal-jurisdictional waters are regulated. Under State law, anybody discharging "waste" (including clean fill, riprap or other revetment, excavation sidecasting, dredge spoils, soil displaced while clearing vegetation, etc.) where it could affect waters of the State must first file a report with the appropriate RWQCB, which will regulate the discharge as necessary to protect the waters.

Stormwater Provisions

The SWRCB has adopted two statewide NPDES general permits addressing stormwater discharges associated with industrial activities and from construction activities (Construction General Permit and Small LUP General Permit). Dischargers are required to eliminate most non-stormwater discharges, develop a stormwater pollution prevention plan (SWPPP) to identify and implement control measures, and monitor their discharges. In Indian country within the State of California, the EPA is the permitting authority and requires the submission of permit number CAR100001.

Dischargers whose projects disturb 1 or more acres of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres are required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit, 99-08-DWQ).⁴⁴ Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

⁴⁰ Pub. Res. Code § 30231.

⁴¹ Pub. Res. Code § 30233.

⁴² Pub. Res. Code § 30236.

⁴³ Pub. Res. Code § 6303.

⁴⁴ Construction General Permit, 99-08-DWQ is available at:
<http://www.swrcb.ca.gov/stormwtr/docs/finalconstpermit.pdf>.

The Construction General Permit requires the development and implementation of a SWPPP. The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list BMPs the discharger will use to control stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) List for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

Small linear underground/overhead projects disturbing at least 1 acre but less than 5 acres (including trenching and staging areas) must be covered by the Statewide General Permit for Stormwater Discharges Associated with Construction Activity from Small Linear Underground/Overhead Projects (Small LUP General Permit).⁴⁵ Linear projects disturbing five or more acres of land must obtain coverage under the Construction General Permit. The Small LUP General Permit has varying application and permitting requirements based on the type and complexity of the project.

California has developed stormwater BMPs for soil erosion and sediment control. These can be found in a variety of handbooks created by the California Stormwater Quality Association. These include the "California Stormwater Quality Association Stormwater BMP Handbooks" for Industrial and Commercial Activity, Construction, Municipal Operations, and New Development and Redevelopment.⁴⁶

⁴⁵ The Small LUP General Permit is available at: http://www.swrcb.ca.gov/stormwtr/linear_const.html#lup.

⁴⁶ These handbooks can be previewed and ordered at: <http://www.cabmphandbooks.org/>.